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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/539,245	03/29/2006	Tetsuji Togawa	2005-0993A	9257

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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

RACHUBA, MAURINA T

ART UNIT	PAPER NUMBER
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3723

MAIL DATE	DELIVERY MODE
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09/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/539,245

Applicant(s)

TOGAWA ET AL.

Examiner

Maurina Rachuba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35,37,38,43,45 and 46 is/are allowed.
- 6) ☒ Claim(s) 36,39-42 and 44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/16/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The substitute specification has been entered.

Election/Restrictions

2. Applicant has overcome the restriction requirement. Therefore, the restriction requirement is withdrawn.

Allowable Subject Matter

3. Claims 35, 37, 38, 43, 45 and 46 are allowed.
4. Claims 36 and 44 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
5. The indicated allowability of previous claim 5 (now claims 39, 40 and 42) is withdrawn in view of the newly discovered reference(s) to Pinson et al, 6,251,001.
Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claims 36 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims limit the retainer ring to providing fluid flow to the polishing surface, but has not previously claimed the combination of the substrate holding mechanism and a polishing table or surface.

Claim Rejections - 35 USC § 102

8. Applicant's amendment has overcome the rejection under 35 USC 102.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 39, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson 5,643,061, as set forth in the previous Office action, and further in view of Pinson et al, 6,251,001. '061 discloses a substrate holding mechanism comprising a mounting flange; a support member secured to the mounting flange; and a retainer ring secured to the mounting flange and arranged around an outer periphery of the support member, such that when a substrate is to be polished the substrate is held on a lower side of the support member and is surrounded by the retainer ring, and is pressed

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against a polishing surface, wherein the mounting flange is provided with a flow passage contiguous with at least the retainer ring for allowing a temperature-controlled gas to be supplied through the flow passage so as to cool the mounting flange, the support member and the retainer ring. '061 does not disclose that the gas is a moist gas. In a similar device, '001 teaches applying a moistened gas to a polishing area of a CMP device, to reduce air-borne particles generated during polishing. Because both references teach apparatus for polishing substrates, it would have been obvious to one of ordinary skill in the art to have provided '061 with the moistened gas taught by '001, to achieve the predictable result of reducing air-borne contaminants, and preventing damage to the substrate. Note that the gas supplied is inherently temperature controlled, in that if it is too hot, it contributes to the heat generated during the polishing process and will cause damage to the wafer.

12. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al, 5,643,061 in view of Pinson et al, 6,251,001 as applied to claim 39, and further in view of Jackson et al, 6,241,591. '061 as modified by '001 does not disclose the retainer ring provided with a plurality of through holes in communication with the flow passage. '591, figure 2 and column 3, lines 35-45, teaches providing a retainer ring with through holes in communication with the flow passage. It would have been obvious to one of ordinary skill in the art to have provided '061 with the through holes of '591, to prevent trapped gas from changing the pressure of the wafer against the polishing pad.

Response to Arguments

13. Applicant's arguments with respect to claims 39-42 have been considered but are moot in view of the new ground(s) of rejection. This action is made non-final to allow applicant fair opportunity to respond.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maurina Rachuba whose telephone number is 571 272 4493. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571 272 4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. Rachuba/
Primary Examiner
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